

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (withdrawn): A method for treatment of neuropsychiatric disorders which comprises administration of a D-serine transport inhibitor at a dose sufficient to enhance NMDA receptor-mediated neurotransmission in vivo.
2. (withdrawn): The method of claim 1 wherein the disorder is associated with decreased *N*-methyl-D-aspartate (NMDA) receptor-mediated neurotransmission.
3. (withdrawn): The method of claim 1 wherein the disorder is a psychotic disorder.
4. (withdrawn): The method of claim 3 wherein the psychotic disorder is schizophrenia.
5. (withdrawn): The method of claim 1 wherein the disorder is Alzheimer's disease, bipolar illness, depression and anxiety disorders, stroke or epilepsy.
6. (withdrawn): The method of claim 1 wherein the disorder is age associated memory impairment, closed head injury or attention deficit disorder.

7. (withdrawn): The method of claim 1 wherein such agent is administered orally.
8. (withdrawn): The method of claim 1 wherein a D-serine transport inhibitor is administered parenterally.
9. (withdrawn): A method for augmentation of *N-methyl-D*-aspartate receptor-mediated neurotransmission in vivo which comprises administration of a D-serine transport antagonist.
10. (withdrawn): The method of claim 1 or 9 wherein the antagonist is an inhibitor of D-serine transport mediated through system ASC.
11. (withdrawn): The method of claim 1 or 9 wherein the antagonist is an inhibitor of systems L, N, A or Gly.
12. (withdrawn): The method of claim 1 or 9 wherein the antagonist is an inhibitor of alanine-sensitive D-serine transport.
13. (withdrawn): The method of claim 1 or 9 where the antagonist is an inhibitor of alanine-insensitive D-serine transport.

14. (withdrawn): The method of claim 1 or 9 wherein the agent is glycyldodecylamide, D-serine dodecylamide or D-alanine dodecylamide.

15. (withdrawn): The method of claim 1 or 9 wherein the agent is used in combination with typical or atypical antipsychotics administered orally, parenterally or by depot formulation.

16. (withdrawn): The method of claim 1 or 9 wherein the agent is used in combination with other treatments commonly used in schizophrenia, including but not limited to antidepressants, mood stabilizers, or antianxiety agents.

17. (withdrawn): The method of claim 1 or 9 wherein the agent is used in combination with a glycine transport inhibitor.

18. (currently amended): A composition for treating schizophrenia comprising an effective amount of a selective D-serine transport inhibitor as the active ingredient and a pharmaceutically acceptable carrier.

19. (currently amended): ~~A~~ The composition of claim 18, wherein the inhibitor is ~~glycyldodecylamide, D-serine dodecylamide or D-alanine dodecylamide.~~

20. (currently amended): ~~A~~The composition of claim 18 wherein the inhibitor is a ~~derivative of~~ serine or alanine compound having effectiveness in inhibiting D-serine transport in vivo.

21. (currently amended): ~~A~~The composition of claim 18 wherein the D-serine transport inhibitor is present in an amount sufficient to augment NMDA-mediated neurotransmission and is combined with a typical or atypical antipsychotic agent administerable orally or parenterally.

22. (currently amended): ~~A~~The composition of claim 20 wherein the ~~derivative is a hydrophobic derivative of~~ serine or alanine inhibitor compound comprises a hydrophobic group.

23. (currently amended): The ~~A~~ composition of claim 22 wherein the ~~derivative is serine or alanine having a~~ hydrophobic group is linked to at least one of the C- and N-terminus of the serine or alanine inhibitor compound.

24. (currently amended): ~~A~~The composition of claim 22 where the hydrophobic group is selected from the group consisting of a C1-C13 alkyl~~(C1-C13)~~ group, an unsubstituted or substituted phenyl group, a C1-C13 phenylalkyl ~~(C1-C13)~~group, a cyano group, a halogen group and a C1-C13 haloalkyl ~~(C1-C13)~~group.

25. (withdrawn): A method of claim 1 wherein a composition of claim 20 is used.
26. (withdrawn): A method of claim 9 wherein a composition of claim 20 is used.
27. (new): A D-serine transport inhibitor compound comprising a serine or alanine compound having a hydrophobic group linked to either the C-or N-terminus, wherein the hydrophobic group is selected from the group consisting of a C1-13 alkyl group optionally substituted with a halogen atom, a phenyl group optionally substituted with a C1-13 alkyl group, a cyano group and a halogen atom.
28. (new): The D-serine transport inhibitor compound according to claim 27, wherein the serine or alanine compound is selected from D-serine, L-serine, D-alanine and L-alanine.
29. (new): The D-serine transport inhibitor compound according to claim 27, wherein the compound is a selective D-serine transport inhibitor.
30. (new): The D-serine transport inhibitor compound according to claim 27, which is selective for glycine uptake inhibition.
31. (new): The D-serine transport inhibitor compound according to claim 30, wherein the inhibitor compound is D-serine dodecylamide.

32. (new): The D-serine transport inhibitor compound according to claim 29, which is selective for D-serine uptake inhibition.

33. (new): The D-serine transport inhibitor compound according to claim 32, wherein the inhibitor compound is D-alanine dodecylamide.

34. (new): A process for augmentation of N-methyl-D-aspartate receptor-mediated neurotransmission *in vivo* which comprises administration of an effective amount of a selective D-serine transport inhibitor.

35. (new): The process of claim 34, wherein a psychotic disorder associated with decreased N-methyl-D-aspartate receptor-mediated neurotransmission is treated.

36. (new): The process of claim 34, wherein schizophrenia is treated.

37. (new): The process of claim 34, wherein a neuropsychiatric disorder selected from the group consisting of Alzheimer's disease, bipolar illness, depression and an anxiety disorder is treated.

38. The process of claim 34, wherein the inhibitor compound is a serine or alanine compound having a hydrophobic group linked to either the C-or N-terminus, wherein the hydrophobic group is selected from the group consisting of a C1-13 alkyl group optionally substituted with a halogen atom, a phenyl group optionally substituted with a C1-13 alkyl group, a cyano group and a halogen atom.

39. (new): The process according to claim 38, wherein the serine or alanine compound is selected from D-serine, L-serine, D-alanine and L-alanine.

40. (new): The process according to claim 38, wherein the inhibitor is selective for D-serine uptake inhibition.

41. (new): The process according to claim 40, wherein the inhibitor is D-alanine dodecylamide.

42. (new): The process according to claim 38, wherein the inhibitor is selective for glycine uptake inhibition.

43. (new): The process according to claim 42, wherein the inhibitor is D-serine dodecylamide.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
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44. A composition for treating schizophrenia comprising an effective amount of a D-serine transport inhibitor according to claim 27 and a pharmaceutically acceptable carrier.